



# The Green Clan

Kickapoo Environmental Office

Volume 8, Issue 4

## Three Sisters Garden – by Alice Formiga

According to Iroquois legend, corn, beans, and squash are three inseparable sisters who only grow and thrive together. This tradition of inter-planting corn, beans and squash in the same mounds, widespread among Native American farming societies, is a sophisticated, sustainable system that provided long-term soil fertility and a healthy diet to generations.

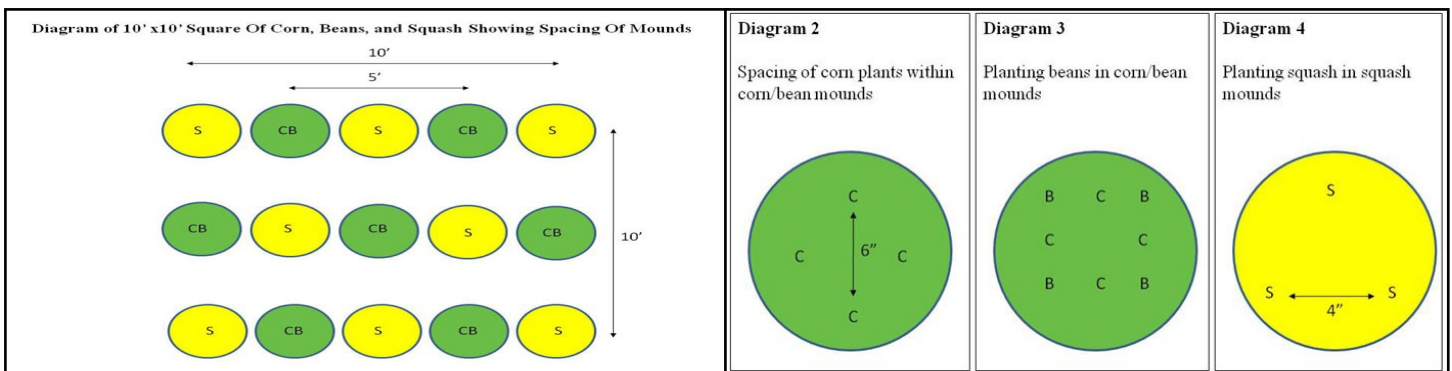
Corn, beans and squash were among the first important crops domesticated by ancient Mesoamerican societies. Corn was the primary crop, providing more calories or energy per acre than any other. According to Three Sisters legends corn must grow in community with other crops rather than on its own - it needs the beneficial company and aide of its companions.

Corn provides a natural pole for bean vines to climb. Beans fix nitrogen on their roots, improving the overall fertility of the plot by providing nitrogen to the following year's corn. Bean vines also help stabilize the corn plants, making them less vulnerable to blowing over in the wind. Shallow-rooted squash vines become a living mulch, shading emerging weeds and preventing soil moisture from evaporating, thereby improving the overall crops chances of survival in dry years. Spiny squash plants also help discourage predators from approaching the corn and beans. The large amount of crop residue from this planting combination can be incorporated back into the soil at the end of the season, to build up the organic matter and improve

its structure.

Corn, beans and squash also complement each other nutritionally. Corn provides carbohydrates, the dried beans are rich in protein, balancing the lack of necessary amino acids found in corn. Finally, squash yields both vitamins from the fruit and healthful, delicious oil from the seeds.

- **In late May or early June, hoe up the ground and heap the earth into piles about a foot high and about 24 inches across. The centers of your mounds should be about four feet apart and should have flattened tops.**
- **First, in the center of each mound, plant five or six corn kernels in a small circle.**
- **After a week or two, when the corn has grown to be five inches or so, plant seven or eight pole beans in a circle about six inches away from the corn kernels.**
- **A week later, at the edge of the mound about a foot away from the beans, plant seven or eight squash or pumpkin seeds.**
- **When the plants begin to grow, you will need to weed out all but a few of the sturdiest of the corn plants from each mound. Also keep the sturdiest of the bean and squash plants and weed out the weaker ones.**
- **As the corn and beans grow up, you want to make sure that the beans are supported by cornstalks, wrapping around the corn. The squash will crawl out between the mounds, around the corn and beans.**





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**We're on the Web!**  
**<http://ktik-nsn.gov>**

**Working Together for a  
Better Community!**

On March 7th, 2012 The Kickapoo Environmental Office along with Kansas State University and Haskell Indian Nations hosted a "Gardening Workshop" at the Senior Citizens Center. A total of 41 tribal residents participated in the workshop.

Agenda items were: weed control, improving soil with compost, insect control and growing tips for tomatoes, peppers, cucumbers and corn. If you were unable to attend this workshop and are interested in any of the handouts, please stop by the Kickapoo Environmental Office.

### April Upcoming Events:

- *Earth Day Celebration – April 20, 2012 9:00am to 12:00 noon. (Meet at the picnic tables by the Kickapoo Environmental Office to sign up) Lunch will be provided @ noon at the Kickapoo Housing Authority*
- *2nd Annual Household Hazardous Waste Round Up – April 20, 2012 8:30am to 4:00pm @ the Kickapoo Environmental Office Parking Lot*

### Recommended Tomato Varieties

#### Short Vined Determinate

Celebrity  
Crista  
Mt. Fresh  
Mt. Spring  
Primo Red (early)  
Scarlet Red  
Florida 91 +  
Sunmaster (heat set)  
Roadrunner III

#### Tall Vined Indeterminate

Jetstar  
Jetsetter  
Big Beef  
Beefmaster  
Conestoga (medium)  
Country Taste  
Grandma's Pick

### Supporting Tomatoes

Space 30" apart with cages

3 foot tall cages for short vined types

5-6 foot tall for tall vined types

No pruning needed except for branches that grow outside cage